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OM protein - protein search, using sw model

Run on: December 4, 2005, 05:56:11 ; Search time 164 Seconds

(without alignments)  
1054.764 Million cell updates/sec

Title: US-09-990-087-17

Perfect score: 2118

Sequence: 1 MGHHHHHIEGRLLKLDND.....SFKVSFLSALAEYTKLNTQ 414

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA Main:

- 1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep.\*
- 2: /cgn2\_6/ptodata/1/pubpaa/US08\_PUBCOMB.pep.\*
- 3: /cgn2\_6/ptodata/1/pubpaa/US09\_PUBCOMB.pep.\*
- 4: /cgn2\_6/ptodata/1/pubpaa/US10A\_PUBCOMB.pep.\*
- 5: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep.\*
- 6: /cgn2\_6/ptodata/1/pubpaa/US11\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2118	100.0	414	4	US-10-465-789A-17
2	2118	100.0	414	5	US-10-979-506-17
3	2118	100.0	414	6	US-11-033-489-17
4	2118	100.0	1094	6	US-11-033-489-119
5	2104	99.3	422	4	US-10-465-789A-19
6	2104	99.3	422	5	US-10-979-506-19
7	2104	99.3	422	6	US-11-033-489-19
8	2049.5	96.8	423	6	US-11-033-489-96
9	1983	93.6	392	4	US-10-465-789A-45
10	1983	93.6	392	5	US-10-979-506-45
11	1983	93.6	392	6	US-11-033-489-45
12	1944.5	91.8	401	6	US-11-033-489-98
13	1923.5	90.8	397	6	US-11-033-489-111
14	1896	89.5	392	4	US-11-033-489-99
15	1839.5	86.9	381	4	US-10-465-789A-86
16	1839.5	86.9	381	6	US-11-033-489-86
17	1820.5	86.0	383	6	US-11-033-489-113
18	1439.5	68.0	381	6	US-11-033-489-117
19	1435.5	67.8	379	6	US-11-033-489-115
20	1319.5	62.3	289	6	US-11-033-489-94
21	1269	59.9	278	6	US-11-033-489-95
22	1204	56.8	278	4	US-10-465-789A-75
23	1204	56.8	278	6	US-11-033-489-75
24	1115	52.6	234	4	US-10-465-789A-73
25	1115	52.6	234	6	US-11-033-489-73
26	1094	51.7	256	4	US-10-465-789A-74
27	1094	51.7	256	6	US-11-033-489-74

28	1093	51.6	212	4	US-10-465-789A-6	Sequence 6, Appli
29	1093	51.6	212	5	US-10-979-506-6	Sequence 6, Appli
30	1093	51.6	212	6	US-11-033-489-6	Sequence 6, Appli
31	1085	51.2	212	6	US-11-033-489-131	Sequence 131, App
32	1085	51.2	212	6	US-11-033-489-133	Sequence 133, App
33	1085	51.2	212	6	US-11-033-489-135	Sequence 135, App
34	1065	50.3	336	3	US-09-987-107-44	Sequence 44, Appl
35	1065	50.3	336	6	US-11-017-037-44	Sequence 44, Appl
36	1065	50.3	336	6	US-11-017-059-44	Sequence 46, Appl
37	1063.5	50.2	337	3	US-09-987-107-46	Sequence 46, Appl
38	1063.5	50.2	337	6	US-11-017-037-46	Sequence 46, Appl
39	1063.5	50.2	337	6	US-11-017-059-46	Sequence 46, Appl
40	1057	49.9	324	3	US-09-987-107-62	Sequence 62, Appl
41	1057	49.9	324	6	US-11-017-037-62	Sequence 62, Appl
42	1057	49.9	324	6	US-11-017-059-62	Sequence 62, Appl
43	1056	49.9	316	3	US-09-987-107-48	Sequence 48, Appl
44	1056	49.9	316	6	US-11-017-037-48	Sequence 48, Appl
45	1056	49.9	316	6	US-11-017-059-48	Sequence 48, Appl

## ALIGNMENTS

RESULT 1  
US-10-465-789A-17  
; Sequence 17, Application US/10465789A  
; Publication No. US20040053384A1  
; GENERAL INFORMATION: His-tagged MSP2  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Yelena V. Grinkova  
; APPLICANT: Iliia G. Denisov  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00A  
; CURRENT APPLICATION NUMBER: US/10/465.789A  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR FILING DATE: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR FILING DATE: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 89  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 17  
; LENGTH: 414  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2  
US-10-465-789A-17

QY	1	MGHHHHHIEGRLLKLDNDSDVTSTFSKRLQGLPVTQEFWDNLEKETEGRLQEMSKDLE	60
DB	1	MGHHHHHIEGRLLKLDNDSDVTSTFSKRLQGLPVTQEFWDNLEKETEGRLQEMSKDLE	60
QY	61	EVKAKVQPYLDDFQKKQEMELRYQKVEPLRAELQEGARQKLHQLKLSPLGEMRDR	120
DB	61	EVKAKVQPYLDDFQKKQEMELRYQKVEPLRAELQEGARQKLHQLKLSPLGEMRDR	120
QY	121	ARAHVDALRTHLAPYSDELRLQRLAARLBALKENGARLAAYHAKATEHLSTLSEKAKAL	180
DB	121	ARAHVDALRTHLAPYSDELRLQRLAARLBALKENGARLAAYHAKATEHLSTLSEKAKAL	180
QY	181	EDLRQGLLPVLESFKVSFLSALAEYTKKLTQGTUKLDNDSDVTSTFSKRLQGLPVTQ	240
DB	181	EDLRQGLLPVLESFKVSFLSALAEYTKKLTQGTUKLDNDSDVTSTFSKRLQGLPVTQ	240
QY	241	EFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKQEMELRYQKVEPLRAELQEG	300

Db 241 EFWDNLEKETGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Qy 301 ARQKLHELQEKLSPLGEMEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGAGRL 360  
Db 301 ARQKLHELQEKLSPLGEMEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGAGRL 360  
Qy 361 AEYHAKATEHLSTLSEKAKPALEDRLQGLLPVLESFKVSFLSALEEYTKKLNQ 414  
Db 361 AEYHAKATEHLSTLSEKAKPALEDRLQGLLPVLESFKVSFLSALEEYTKKLNQ 414

## RESULT 2

US-10-979-506-17  
; Sequence 17, Application US/10979506  
; Publication No. US20050152984A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00C  
; CURRENT APPLICATION NUMBER: US/10/979,506  
; CURRENT FILING DATE: 2004-11-02  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 46  
; SOFTWARE: Patent in version 3.1  
; SEQ ID NO 17  
; LENGTH: 414  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2  
US-10-979-506-17

Query Match 100.0%; Score 2118; DB 5; Length 414;  
Best Local Similarity 100.0%; Pred. No. 4.3e-120;  
Matches 414; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRLQGLPVQTEFWDNLEKETEGRLRQEMSKDLE 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRLQGLPVQTEFWDNLEKETEGRLRQEMSKDLE 60  
Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQEKLSPLGEMEMDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQEKLSPLGEMEMDR 120  
Qy 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGAGRLAEYHAKATEHLSTLSEKAKPAL 180  
Db 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGAGRLAEYHAKATEHLSTLSEKAKPAL 180  
Qy 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKLRLQGLPVQ 240  
Db 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKLRLQGLPVQ 240  
Qy 241 EFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 241 EFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Qy 301 ARQKLHELQEKLSPLGEMEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGAGRL 360  
Db 301 ARQKLHELQEKLSPLGEMEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGAGRL 360  
Qy 361 AEYHAKATEHLSTLSEKAKPALEDRLQGLLPVLESFKVSFLSALEEYTKKLNQ 414  
Db 361 AEYHAKATEHLSTLSEKAKPALEDRLQGLLPVLESFKVSFLSALEEYTKKLNQ 414

## RESULT 3

US-11-033-489-17  
; Sequence 17, Application US/11033489

; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliia G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033,489  
; CURRENT FILING DATE: 2005-01-11  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 10/465,789  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 60/536,281  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: Patent in version 3.3  
; SEQ ID NO 17  
; LENGTH: 414  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2  
US-11-033-489-17

Query Match 100.0%; Score 2118; DB 6; Length 414;  
Best Local Similarity 100.0%; Pred. No. 4.3e-120;  
Matches 414; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRLQGLPVQTEFWDNLEKETEGRLRQEMSKDLE 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRLQGLPVQTEFWDNLEKETEGRLRQEMSKDLE 60  
Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQEKLSPLGEMEMDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQEKLSPLGEMEMDR 120  
Qy 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGAGRLAEYHAKATEHLSTLSEKAKPAL 180  
Db 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGAGRLAEYHAKATEHLSTLSEKAKPAL 180  
Qy 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKLRLQGLPVQ 240  
Db 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKLRLQGLPVQ 240  
Qy 241 EFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 241 EFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Qy 301 ARQKLHELQEKLSPLGEMEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGAGRL 360  
Db 301 ARQKLHELQEKLSPLGEMEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGAGRL 360  
Qy 361 AEYHAKATEHLSTLSEKAKPALEDRLQGLLPVLESFKVSFLSALEEYTKKLNQ 414  
Db 361 AEYHAKATEHLSTLSEKAKPALEDRLQGLLPVLESFKVSFLSALEEYTKKLNQ 414

## RESULT 4

US-11-033-489-119  
; Sequence 119, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R

APPLICANT: Grinkova, Yelena V.  
APPLICANT: Denisov, Iliya G.  
APPLICANT: Grimmer, Stephen G.  
TITLE OF INVENTION: Membrane Scaffold Proteins  
FILE REFERENCE: 87-00B  
CURRENT APPLICATION NUMBER: US/11/033,489  
CURRENT FILING DATE: 2005-01-11  
PRIOR APPLICATION NUMBER: 09/990,087  
PRIOR FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 10/465,789  
PRIOR FILING DATE: 2003-06-18  
PRIOR APPLICATION NUMBER: 60/536,281  
PRIOR FILING DATE: 2004-01-13  
PRIOR APPLICATION NUMBER: 60/252,233  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 136  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 119  
LENGTH: 1094  
TYPE: PRT  
ORGANISM: Artificial  
FEATURE:  
OTHER INFORMATION: MSP2CPR  
US-11-033-489-119

Query Match 100.0%; Score 2118; DB 6; Length 1094;  
Best Local Similarity 100.0%; Pred. No. 1.3e-119; Indels 0; Gaps 0;  
Matches 414; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLQGPVTQEFWDNLEKETEGLRQEMSKDLE 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLQGPVTQEFWDNLEKETEGLRQEMSKDLE 60  
Qy 61 EVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEGARQKJHELOEKLSPLGEEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEGARQKJHELOEKLSPLGEEMRDR 120  
Qy 121 ARAHVDAALRTHLAPYSDELRLQRLAARLEALKENGARLAELAHAKATEHLSTLSEKAKPAL 180  
Db 121 ARAHVDAALRTHLAPYSDELRLQRLAARLEALKENGARLAELAHAKATEHLSTLSEKAKPAL 180  
Qy 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLTQGTGLKLLDNWDSVTSTFSKLRQLQGPVTQ 240  
Db 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLTQGTGLKLLDNWDSVTSTFSKLRQLQGPVTQ 240  
Qy 241 EFWNLEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELOEG 300  
Db 241 EFWNLEKETEGRLQEMSKDLEEVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELOEG 300  
Qy 301 ARQKJHELOEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 360  
Db 301 ARQKJHELOEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 360  
Qy 361 AEYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLTQ 414  
Db 361 AEYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLTQ 414

RESULT 5  
US-10-465-789A-19  
Sequence 19, Application US/10465789A  
Publication No. US20040053384A1  
GENERAL INFORMATION:  
APPLICANT: Sligar, Stephen G  
APPLICANT: Bayburt, Timothy H  
APPLICANT: Schuler, Mary A  
APPLICANT: Civjan, Natanva R  
APPLICANT: Yelena V. Grinkova  
APPLICANT: Iliya G. Denisov  
TITLE OF INVENTION: Membrane Scaffold Proteins  
FILE REFERENCE: 87-00A  
CURRENT APPLICATION NUMBER: US/10/465,789A  
CURRENT FILING DATE: 2003-06-18

PRIOR APPLICATION NUMBER: 09/990,087  
PRIOR FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 60/252,233  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 89  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 19  
LENGTH: 422  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: His-tagged MSP2L  
US-10-465-789A-19

Query Match 99.3%; Score 2104; DB 4; Length 422;  
Best Local Similarity 98.1%; Pred. No. 3.1e-119;  
Matches 414; Conservative 0; Mismatches 0; Indels 8; Gaps 1;  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLQGPVTQEFWDNLEKETEGLRQEMSKDLE 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLQGPVTQEFWDNLEKETEGLRQEMSKDLE 60  
Qy 61 EVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEGARQKJHELOEKLSPLGEEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEGARQKJHELOEKLSPLGEEMRDR 120  
Qy 121 ARAHVDAALRTHLAPYSDELRLQRLAARLEALKENGARLAELAHAKATEHLSTLSEKAKPAL 180  
Db 121 ARAHVDAALRTHLAPYSDELRLQRLAARLEALKENGARLAELAHAKATEHLSTLSEKAKPAL 180  
Qy 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLTQGTGLKLLDNWDSVTSTFSKLR 232  
Db 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLTQGTGLKLLDNWDSVTSTFSKLR 240  
Qy 233 EQLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEEEMELYRQKVEP 292  
Db 241 EQLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEEEMELYRQKVEP 300  
Qy 293 LRASLQEGARQKJHELOEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEAL 352  
Db 301 LRASLQEGARQKJHELOEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEAL 360  
Qy 353 KENGARLAELAHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLN 412  
Db 361 KENGARLAELAHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLN 420  
Qy 413 TQ 414  
Db 421 TQ 422

RESULT 6  
US-10-979-506-19  
Sequence 19, Application US/10979506  
Publication No. US20050152984A1  
GENERAL INFORMATION:  
APPLICANT: Sligar, Stephen G  
APPLICANT: Bayburt, Timothy H  
TITLE OF INVENTION: Membrane Scaffold Proteins  
FILE REFERENCE: 87-00C  
CURRENT APPLICATION NUMBER: US/10/979,506  
CURRENT FILING DATE: 2004-11-02  
PRIOR APPLICATION NUMBER: 09/990,087  
PRIOR FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 60/252,233  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 46  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 19  
LENGTH: 422  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:

OTHER INFORMATION: His-tagged MSP2L  
US-10-979-506-19

Query Match 99.3%; Score 2104; DB 5; Length 422;  
Best Local Similarity 98.1%; Pred. No. 3.1e-119;  
Matches 414; Conservative 0; Mismatches 0; Indels 8; Gaps 1;  
QY 1 MGHHHHHHIEGRKLLDNWDSVTSTFSKLRQELGPTVQEFWDNLEKETEGIRQEMSKDLE 60  
DB 1 MGHHHHHHIEGRKLLDNWDSVTSTFSKLRQELGPTVQEFWDNLEKETEGIRQEMSKDLE 60  
QY 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDR 120  
DB 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDR 120  
QY 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPAL 180  
DB 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPAL 180  
QY 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLTQ-----GTLKLLDNWDSVTSTFSKLR 232  
DB 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLTQ-----GTLKLLDNWDSVTSTFSKLR 240  
QY 233 EQLGPTVQEFWDNLEKETEGIRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEP 292  
DB 241 EQLGPTVQEFWDNLEKETEGIRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEP 300  
QY 293 LRAELQEGARQKLHELOEKLSPGLGEEMRDRARAHVDALRTHLAPYSDELQRLAARLEAL 352  
DB 301 LRAELQEGARQKLHELOEKLSPGLGEEMRDRARAHVDALRTHLAPYSDELQRLAARLEAL 360  
QY 353 KENGARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLN 412  
DB 361 KENGARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLN 420  
QY 413 TQ 414  
DB 421 TQ 422

RESULT 7  
US-11-033-489-19  
; Sequence 19, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliia G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033,489  
; PRIOR FILING DATE: 2005-01-11  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 10/465,789  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 60/536,281  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 19  
; LENGTH: 422  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2L  
US-11-033-489-19

Query Match 99.3%; Score 2104; DB 6; Length 422;  
Best Local Similarity 98.1%; Pred. No. 3.1e-119;  
Matches 414; Conservative 0; Mismatches 0; Indels 8; Gaps 1;  
QY 1 MGHHHHHHIEGRKLLDNWDSVTSTFSKLRQELGPTVQEFWDNLEKETEGIRQEMSKDLE 60  
DB 1 MGHHHHHHIEGRKLLDNWDSVTSTFSKLRQELGPTVQEFWDNLEKETEGIRQEMSKDLE 60  
QY 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDR 120  
DB 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGLGEEMRDR 120  
QY 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPAL 180  
DB 121 ARAHVDAALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPAL 180  
QY 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLTQ-----GTLKLLDNWDSVTSTFSKLR 232  
DB 181 EDLRQGLLPVLESFKVSFLSALEEYTKKLTQ-----GTLKLLDNWDSVTSTFSKLR 240  
QY 233 EQLGPTVQEFWDNLEKETEGIRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEP 292  
DB 241 EQLGPTVQEFWDNLEKETEGIRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEP 300  
QY 293 LRAELQEGARQKLHELOEKLSPGLGEEMRDRARAHVDALRTHLAPYSDELQRLAARLEAL 352  
DB 301 LRAELQEGARQKLHELOEKLSPGLGEEMRDRARAHVDALRTHLAPYSDELQRLAARLEAL 360  
QY 353 KENGARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLN 412  
DB 361 KENGARLAAYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLN 420  
QY 413 TQ 414  
DB 421 TQ 422

RESULT 8  
US-11-033-489-96  
; Sequence 96, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliia G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033,489  
; PRIOR FILING DATE: 2005-01-11  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 10/465,789  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 60/536,281  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 96  
; LENGTH: 423  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: MSP2TEV  
US-11-033-489-96

Query Match 96.8%; Score 2049.5; DB 6; Length 423;

Best Local Similarity 96.0%; Pred. No. 6e-116; Indels 15; Gaps 4; Matches 409; Conservative 1; Mismatches 1;

Qy 1 MGHHHHH-----TEGRLKLLDNWDSVTSTFSKLRQLGPGVTOEFWDLNLEKET 48  
Db 1 MGHHHHHHDYDIPPTENLYFQG-LKLLDNWDSVTSTFSKLRQLGPGVTOEFWDLNLEKET 59

Qy 49 EGLQEQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQ 108  
Db 60 EGLQEQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQ 119

Qy 109 KLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEH 168  
Db 120 KLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEH 179

Qy 169 LSTLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYTKLNTQGLTKLLDNWDSVTSTF 228  
Db 180 LSTLSEKAKPALEDLRQGLLPVLESFKVSFLSAL- EYTKLNTQGLTKLLDNWDSVTSTF 238

Qy 229 SKLRQLGPGVTOEFWDLNLEKETEGLRQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQ 288  
Db 239 SKLRQLGPGVTOEFWDLNLEKETEGLRQEM-KDLEEVKAKVQPYLDDFQKKWQEMELYRQ 297

Qy 289 KVEPLRAELQEGARQKLHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAAR 348  
Db 298 KVEPLRAELQEGARQKLHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAAR 357

Qy 349 LEALKENGARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYT 408  
Db 358 LEALKENGARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYT 417

Qy 409 KKLNTQ 414  
Db 418 KKLNTQ 423

RESULT 9  
US-10-465-789A-45  
; Sequence 45, Application US/10465789A  
; Publication No. US20040053384A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Yelena V. Grinkova  
; APPLICANT: Iliia G. Denisov  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00A  
; CURRENT APPLICATION NUMBER: US/10/465,789A  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 89  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 45  
; LENGTH: 392  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2 delta 1  
US-10-465-789A-45

Query Match 93.6%; Score 1983; DB 4; Length 392;  
Best Local Similarity 94.7%; Pred. No. 5.7e-112;  
Matches 392; Conservative 0; Mismatches 0; Indels 22; Gaps 2;

Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLGPGVTOEFWDLNLEKETEGLRQMSKDL 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLGPGVTOEFWDLNLEKETEGLRQMS- 56

Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEMDR 120  
Db 57 -----PYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEMDR 109

Qy 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
Db 110 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 169

Qy 181 EDLRQGLLPVLESFKVSFLSALBEYTKLNTQGLTKLLDNWDSVTSTFSKLRQLGPGVTQ 240  
Db 170 EDLRQGLLPVLESFKVSFLSALBEYTKLNTQGLTKLLDNWDSVTSTFSKLRQLGPGVTQ 229

Qy 241 EFWDLNLEKETEGLRQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 230 EFWDLNLEKETEGLRQMS-----PYLDDFQKKWQEMELYRQKVEPLRAELQEG 278

Qy 301 ARQKLHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 360  
Db 279 ARQKLHELQKLSPLGEMDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 338

Qy 361 AEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYTKLNTQ 414  
Db 339 AEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALBEYTKLNTQ 392

RESULT 10  
US-10-979-506-45  
; Sequence 45, Application US/10979506  
; Publication No. US20050152984A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00C  
; CURRENT APPLICATION NUMBER: US/10/979,506  
; CURRENT FILING DATE: 2004-11-02  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 46  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 45  
; LENGTH: 392  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2 delta 1  
US-10-979-506-45

Query Match 93.6%; Score 1983; DB 5; Length 392;  
Best Local Similarity 94.7%; Pred. No. 5.7e-112;  
Matches 392; Conservative 0; Mismatches 0; Indels 22; Gaps 2;

Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLGPGVTOEFWDLNLEKETEGLRQMSKDL 60  
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLRQLGPGVTOEFWDLNLEKETEGLRQMS- 56

Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEMDR 120  
Db 57 -----PYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELQKLSPLGEMDR 109

Qy 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
Db 110 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 169

Qy 181 EDLRQGLLPVLESFKVSFLSALBEYTKLNTQGLTKLLDNWDSVTSTFSKLRQLGPGVTQ 240  
Db 170 EDLRQGLLPVLESFKVSFLSALBEYTKLNTQGLTKLLDNWDSVTSTFSKLRQLGPGVTQ 229

Qy 241 EFWDLNLEKETEGLRQMSKDLLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 230 EFWDLNLEKETEGLRQMS-----PYLDDFQKKWQEMELYRQKVEPLRAELQEG 278

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Qy 301 ARQKHELOEKLSPGEMRDRARAHVDALRTHLAPYSDELQRLQRLAARLEALKENGARL 360
Db 279 ARQKHELOEKLSPGEMRDRARAHVDALRTHLAPYSDELQRLQRLAARLEALKENGARL 338
Qy 361 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVFSLSALEEYTKKLNQ 414
Db 339 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVFSLSALEEYTKKLNQ 392

RESULT 11
US-11-033-489-45
; Sequence 45, Application US/11033489
; Publication No. US20050182243A1
; GENERAL INFORMATION:
; APPLICANT: Sligar, Stephen G
; APPLICANT: Bayburt, Timothy H
; APPLICANT: Schuler, Mary A
; APPLICANT: Civjan, Natanya R
; APPLICANT: Grinkova, Yelena V.
; APPLICANT: Denisov, Iliia G.
; APPLICANT: Grimme, Stephen G.
; TITLE OF INVENTION: Membrane Scaffold Proteins
; FILE REFERENCE: 87-008
; CURRENT APPLICATION NUMBER: US/11/033,489
; CURRENT FILING DATE: 2005-01-11
; PRIOR APPLICATION NUMBER: 09/990,087
; PRIOR FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: 10/465,789
; PRIOR FILING DATE: 2003-06-18
; PRIOR APPLICATION NUMBER: 60/536,281
; PRIOR FILING DATE: 2004-01-13
; PRIOR APPLICATION NUMBER: 60/252,233
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 136
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 45
; LENGTH: 392
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: His-cagged MSP2 delta 1
US-11-033-489-45

Query Match 93.6%; Score 1983; DB 6; Length 392;
Best Local Similarity 94.7%; Pred. No. 5.7e-112;
Matches 392; Conservative 0; Mismatches 0; Indels 22; Gaps 2;

Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLREQQLGPTQEFWDNLEKETEGLRQEMSKDLE 60
Db 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLREQQLGPTQEFWDNLEKETEGLRQEMSKDLE 56

Qy 61 EVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGSEMRDR 120
Db 57 -----PYLDDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGSEMRDR 109

Qy 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAPAL 180
Db 110 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAPAL 169

Qy 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLNQGLTKLLDNWDSVTSTFSKLREQQLGPTQ 240
Db 170 EDLRQGLLPVLESFKVFSLSALEEYTKKLNQGLTKLLDNWDSVTSTFSKLREQQLGPTQ 229

Qy 241 EFWNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEG 300
Db 230 EFWNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEG 278

Qy 301 ARQKHELOEKLSPGEMRDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 360
Db 279 ARQKHELOEKLSPGEMRDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 338

Qy 361 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVFSLSALEEYTKKLNQ 414
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Db 339 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVFSLSALEEYTKKLNQ 392

RESULT 12
US-11-033-489-98
; Sequence 98, Application US/11033489
; Publication No. US20050182243A1
; GENERAL INFORMATION:
; APPLICANT: Sligar, Stephen G
; APPLICANT: Bayburt, Timothy H
; APPLICANT: Schuler, Mary A
; APPLICANT: Civjan, Natanya R
; APPLICANT: Grinkova, Yelena V.
; APPLICANT: Denisov, Iliia G.
; APPLICANT: Grimme, Stephen G.
; TITLE OF INVENTION: Membrane Scaffold Proteins
; FILE REFERENCE: 87-008
; CURRENT APPLICATION NUMBER: US/11/033,489
; CURRENT FILING DATE: 2005-01-11
; PRIOR APPLICATION NUMBER: 09/990,087
; PRIOR FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: 10/465,789
; PRIOR FILING DATE: 2003-06-18
; PRIOR APPLICATION NUMBER: 60/536,281
; PRIOR FILING DATE: 2004-01-13
; PRIOR APPLICATION NUMBER: 60/252,233
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 136
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 98
; LENGTH: 401
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: MSP2N1
US-11-033-489-98

Query Match 91.8%; Score 1944.5; DB 6; Length 401;
Best Local Similarity 93.5%; Pred. No. 1.2e-109;
Matches 387; Conservative 3; Mismatches 11; Indels 13; Gaps 1;

Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKLREQQLGPTQEFWDNLEKETEGLRQEMSKDLE 60
Db 1 MGHHHHHHDYDIPTTENLYFGSTTFSKLREQQLGPTQEFWDNLEKETEGLRQEMSKDLE 60

Qy 61 EVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGSEMRDR 120
Db 61 EVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGSEMRDR 120

Qy 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAPAL 180
Db 121 ARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAPAL 180

Qy 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLNQGLTKLLDNWDSVTSTFSKLREQQLGPTQ 240
Db 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLNQGLTKLLDNWDSVTSTFSKLREQQLGPTQ 227

Qy 241 EFWNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEG 300
Db 228 EFWNLEKETEGLRQEMSKDLEEVKAKVQPYLDDDFQKKQWQEMELYRQKVEPLRAELQEG 287

Qy 301 ARQKHELOEKLSPGSEMRDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 360
Db 288 ARQKHELOEKLSPGSEMRDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARL 347

Qy 361 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVFSLSALEEYTKKLNQ 414
Db 348 AEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVFSLSALEEYTKKLNQ 401

RESULT 13
US-11-033-489-111
```

; Sequence 111, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliia G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033.489  
; CURRENT FILING DATE: 2005-01-11  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 10/465,789  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 60/536,281  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: Patent in version 3.3  
; SEQ ID NO 111  
; LENGTH: 397  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: MSP2N3  
US-11-033-489-111

Query Match 90.8%; Score 1923.5; DB 6; Length 397;  
Best Local Similarity 92.5%; Pred. No. 2.3e-108;  
Matches 383; Conservative 3; Mismatches 11; Indels 17; Gaps 1;  
  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKRLQGLGVTQEFWDNLEKETEGLRQEMSKDLE 60  
Db 1 MGHHHHHHDYDPTTENLYFGSTFSKRLQGLGVTQEFWDNLEKETEGLRQEMSKDLE 60  
  
Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGSEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGSEMRDR 120  
  
Qy 121 ARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
Db 121 ARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
  
Qy 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLTQGT-----REQLGPTQ 240  
Db 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLTQGT-----REQLGPTQ 223  
  
Qy 241 EFDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 224 EFDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 283  
  
Qy 301 ARQKLHELOEKLSPGSEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 360  
Db 284 ARQKLHELOEKLSPGSEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 343  
  
Qy 361 AEYHAKATEHLSLSEKAKPALEDRLQGLLPVLESFKVFSLSALEEYTKKLTQ 414  
Db 344 AEYHAKATEHLSLSEKAKPALEDRLQGLLPVLESFKVFSLSALEEYTKKLTQ 397

RESULT 14  
US-11-033-489-99  
; Sequence 99, Application US/11033489  
; Publication No. US20050182243A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A

; APPLICANT: Civjan, Natanya R  
; APPLICANT: Grinkova, Yelena V.  
; APPLICANT: Denisov, Iliia G.  
; APPLICANT: Grimme, Stephen G.  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00B  
; CURRENT APPLICATION NUMBER: US/11/033.489  
; CURRENT FILING DATE: 2005-01-11  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 10/465,789  
; PRIOR FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 60/536,281  
; PRIOR FILING DATE: 2004-01-13  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 136  
; SOFTWARE: Patent in version 3.3  
; SEQ ID NO 99  
; LENGTH: 392  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: MSP2N2  
US-11-033-489-99

Query Match 89.5%; Score 1896; DB 6; Length 392;  
Best Local Similarity 91.3%; Pred. No. 1e-106;  
Matches 378; Conservative 3; Mismatches 11; Indels 22; Gaps 1;  
  
Qy 1 MGHHHHHIEGRLLKLLDNWDSVTSTFSKRLQGLGVTQEFWDNLEKETEGLRQEMSKDLE 60  
Db 1 MGHHHHHHDYDPTTENLYFGSTFSKRLQGLGVTQEFWDNLEKETEGLRQEMSKDLE 60  
  
Qy 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGSEMRDR 120  
Db 61 EVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGSEMRDR 120  
  
Qy 121 ARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
Db 121 ARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLSLSEKAKPAL 180  
  
Qy 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLTQGT-----PVTQ 240  
Db 181 EDLRQGLLPVLESFKVFSLSALEEYTKKLTQGT-----PVTQ 218  
  
Qy 241 EFDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 300  
Db 219 EFDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEG 278  
  
Qy 301 ARQKLHELOEKLSPGSEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 360  
Db 279 ARQKLHELOEKLSPGSEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARL 338  
  
Qy 361 AEYHAKATEHLSLSEKAKPALEDRLQGLLPVLESFKVFSLSALEEYTKKLTQ 414  
Db 339 AEYHAKATEHLSLSEKAKPALEDRLQGLLPVLESFKVFSLSALEEYTKKLTQ 392

RESULT 15  
US-10-465-789A-86  
; Sequence 86, Application US/10465789A  
; Publication No. US20040053384A1  
; GENERAL INFORMATION:  
; APPLICANT: Sligar, Stephen G  
; APPLICANT: Bayburt, Timothy H  
; APPLICANT: Schuler, Mary A  
; APPLICANT: Civjan, Natanya R  
; APPLICANT: Yelena V. Grinkova  
; APPLICANT: Iliia G. Denisov  
; TITLE OF INVENTION: Membrane Scaffold Proteins  
; FILE REFERENCE: 87-00A  
; CURRENT APPLICATION NUMBER: US/10/465.789A

; CURRENT FILING DATE: 2003-06-18  
; PRIOR APPLICATION NUMBER: 09/990,087  
; PRIOR FILING DATE: 2001-11-20  
; PRIOR APPLICATION NUMBER: 60/252,233  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 89  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 86  
; LENGTH: 381  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: His-tagged MSP2D1D1  
US-10-465-789A-86

Query Match 86.9%; Score 1839.5; DB 4; Length 381;  
Best Local Similarity 89.0%; Pred. No. 2.5e-103;  
Matches 371; Conservative 3; Mismatches 4; Indels 39; Gaps 4;  
  
QY 1 MGHHHHHHIEGRLLKLLDNWDSVTSTFSKLRQL--GPVTQEFWDNLEKETEGLRQEMSK 57  
DB 1 MGHHHHHH-----HDYDIPPT-----ENLYFQGPVTQEFWDNLEKETEGLRQEMSK 46  
QY 58 DLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGGEEM 117  
DB 47 DLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGGEEM 106  
QY 118 RDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAHYHAKATEHLSLSEKAK 177  
DB 107 RDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAHYHAKATEHLSLSEKAK 166  
QY 178 PALEDLRQGLLPVLESFKVSFLSALAEYTKKLTQGT-----P 204  
DB 167 PALEDLRQGLLPVLESFKVSFLSALAEYTKKLTQGT-----P 204  
QY 238 VTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAEL 297  
DB 205 VTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAEL 264  
QY 298 QEGARQKLHELOEKLSPGGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENG 357  
DB 265 QEGARQKLHELOEKLSPGGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENG 324  
QY 358 ARLAEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALAEYTKKLTQ 414  
DB 325 ARLAEYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALAEYTKKLTQ 381

Search completed: December 4, 2005, 06:22:35  
Job time : 165 secs



GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: December 4, 2005, 05:43:55 ; Search time 46 Seconds  
(without alignments)  
744.081 Million cell updates/sec

Title: US-09-990-087-17  
Perfect score: 2118  
Sequence: 1 MGHHHHHIEGRKLKLDNWD.....SFKVSFLSALEYTKLNTQ 414

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA:\*  
1: /cgn2\_6/ptodata/1/iaa/5-COMB.pep:\*  
2: /cgn2\_6/ptodata/1/iaa/6-COMB.pep:\*  
3: /cgn2\_6/ptodata/1/iaa/H-COMB.pep:\*  
4: /cgn2\_6/ptodata/1/iaa/PCUTUS-COMB.pep:\*  
5: /cgn2\_6/ptodata/1/iaa/RE-COMB.pep:\*  
6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1065	50.3	336	2	US-09-987-107-44
2	1063.5	50.2	337	2	US-09-987-107-46
3	1057	49.9	324	2	US-09-987-107-62
4	1056	49.9	316	2	US-09-987-107-48
5	1056	49.9	324	2	US-09-987-107-64
6	1051	49.6	316	2	US-09-987-107-54
7	1051	49.6	324	2	US-09-987-107-66
8	1049.5	49.6	323	2	US-09-987-107-58
9	1047.5	49.5	323	2	US-09-987-107-56
10	1045.5	49.4	323	2	US-09-987-107-60
11	1042	49.2	304	2	US-09-987-107-8
12	1041	49.2	304	2	US-09-987-107-7
13	1039.5	49.1	261	2	US-09-987-107-52
14	1038	49.0	304	2	US-09-987-107-6
15	1036.5	48.9	301	2	US-09-987-107-5
16	1036	48.9	306	2	US-09-987-107-9
17	1035.5	48.9	301	2	US-09-987-107-3
18	1034	48.8	306	2	US-09-987-107-11
19	1034	48.8	344	2	US-09-987-107-68
20	1033	48.8	306	2	US-09-987-107-10
21	1031.5	48.7	273	2	US-09-987-107-50
22	1029	48.6	258	2	US-09-987-107-4
23	1024	48.3	243	2	US-09-079-030-119
24	1024	48.3	243	2	US-09-987-107-1
25	1024	48.3	244	2	US-09-987-107-2
26	1024	48.3	267	1	US-07-959-946-3
27	1024	48.3	267	1	US-08-333-577-3

ALIGNMENTS

RESULT 1  
US-09-987-107-44  
; Sequence 44, Application US/09987107  
; Patent No. 6897039  
; GENERAL INFORMATION:  
; APPLICANT: GRAVERSEN, Jonas  
; APPLICANT: MOESTRUP, Soren  
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES  
; FILE REFERENCE: GRAVERSENIA  
; CURRENT APPLICATION NUMBER: US/09/987.107  
; CURRENT FILING DATE: 2001-11-13  
; PRIOR APPLICATION NUMBER: US 60/264,022  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: DK PA2001 00057  
; PRIOR FILING DATE: 2001-01-15  
; PRIOR APPLICATION NUMBER: DK PA2000 01682  
; PRIOR FILING DATE: 2000-11-10  
; NUMBER OF SEQ ID NOS: 91  
; SOFTWARE: Patentin version 3.1  
; SEQ ID NO 44  
; LENGTH: 336  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: pT7 H6ubiF Apo A-1 plasmid  
US-09-987-107-44

Query Match	50.3%	Score 1065;	DB 2;	Length 336;
Best Local Similarity	57.7%	Pred. No. 2.5e-69;		
Matches	240;	Conservative	27;	Mismatches 67;
				Indels 82; Gaps 7;
Qy	1	MGHHHHHIEGRKLKLDNWD	SVTSTFSKLRQLQGPVTQEFWDNLEKETEGRQEMSKDLE	60
Db	1	MGSHHHH-HG-	-----SQIFVKLTITGKTTITLEVPSDTIE	34
Qy	61	EVKAKVQPYLDDFOKKQWEMELYRQKVEPLRAELQEGARQKLHLEKLSPLGEMDR	120	
Db	35	NVAKIQD-----KEGIPDQQLIFAGKLEDGRTLSDYNIQ-KESTLHLVLRLR	84	
Qy	121	ARAHVDALRTHLAPVS--DELQRQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAP	178	
Db	85	G-GSIEGGGDEPPQSPWDRVKDLATVYVDVKSGRDYVSQFEGSA-----	130	
Qy	179	ALEDRLQGLLPVLESFKVSFLSALEYTKLNTQGTLLKLDNWD	SVTSTFSKLRQLQGPV	238
Db	131	-----LGKQLNLKLDNWD	SVTSTFSKLRQLQGPV	160
Qy	239	TQEFWDNLEKETEGRQEMSKDLEEVKAKVQPYLDDFOKKQWEMELYRQKVEPLRAELQ	298	
Db	161	TQEFWDNLEKETEGRQEMSKDLEEVKAKVQPYLDDFOKKQWEMELYRQKVEPLRAELQ	220	

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QY 299 EGAROKLHLEQKLSPLGSEMRDRARAHVDALRTHLAPYSDELQRLAARLEAKENGGA 358
Db 221 EGAROKLHLEQKLSPLGSEMRDRARAHVDALRTHLAPYSDELQRLAARLEAKENGGA 280
QY 359 RLAEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVSLSALEEYTKKLNQ 414
Db 281 RLAEYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVSLSALEEYTKKLNQ 336

RESULT 2
US-09-987-107-46
; Sequence 46, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 46
; LENGTH: 337
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: T7 H6Ubirx Cys-Apo A-1 plasmid
US-09-987-107-46

Query Match 50.2%; Score 1063.5; DB 2; Length 337;
Best Local Similarity 57.5%; Pred. No. 3.2e-69;
Matches 242; Conservative 25; Mismatches 63; Indels 91; Gaps 8;

QY 1 MGHSHHHHIEGRKLLDNWDSVTSTFSKRLQGLPVTQEFWDNLEKETEGLRQMSKDLE 60
Db 1 MGSHHHH-HG-----SQIFVKTLTGKITLEVEPSDTIE 34
QY 61 EVKAKVQPYLDDFOKKQWEMELYRQKVEPLRAELQEGARQKLHLEQKLSPLGEEMRDR 120
Db 35 NVKAKIQD-----KEGIPPDQRLIFAGKQLEDGRTLSDYNIQ-KESTLHLVLR 84
QY 121 -----ARAHVDALRTHLAPYS--DELQRLAARLEAKENGARLAAYHAKATEHLSTLS 173
Db 85 GGSIEGRGGCDE-----PPQSPWDRVKDLATVYVDVLKSGRDYVSQFEGSA----- 131
QY 174 EKAKPALEDLRQGLLPVLESFKVSLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKLRE 233
Db 132 -----LGKQLNLKLLDNWDSVTSTFSKLRE 156
QY 234 QLGPVTQEFWDNLEKETEGLRQMSKDLEEVKAKVQPYLDDFOKKQWEMELYRQKVEPL 293
Db 157 QLGPVTQEFWDNLEKETEGLRQMSKDLEEVKAKVQPYLDDFOKKQWEMELYRQKVEPL 216
QY 294 RAELOEGARQKLHLEQKLSPLGSEMRDRARAHVDALRTHLAPYSDELQRLAARLEAK 353
Db 217 RAELOEGARQKLHLEQKLSPLGSEMRDRARAHVDALRTHLAPYSDELQRLAARLEAK 276
QY 354 ENGGRARLAAYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVSLSALEEYTKKLN 413
Db 277 ENGGRARLAAYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVSLSALEEYTKKLN 336
QY 414 Q 414
Db 337 Q 337
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```
RESULT 3
US-09-987-107-62
; Sequence 62, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 62
; LENGTH: 324
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7H6 (GS)3 Trip-A-Tn-Apo A1 AmpR plasmid
US-09-987-107-62

Query Match 49.9%; Score 1057; DB 2; Length 324;
Best Local Similarity 56.3%; Pred. No. 8.9e-69;
Matches 238; Conservative 33; Mismatches 44; Indels 108; Gaps 11;

QY 1 MGHSHHHH-----TEGRKLLDNWDSVTSTFSKRLQGLPVTQEFWDNLEKETEGLRQ 53
Db 1 MGSHHHHHGGSGSGSIQGRSPGTE-----PPTQK-----PKKIVNAKK 38
QY 54 EM--SKDLEEVKAKVQPYLDDFOKKQWEMELYRQKVEPLRAELQEGARQKLHLEQKLS 111
Db 39 DVNTNQMFEELKSR----LDTL-----AQEVALIKEQ-QALQTVSLKGS--KVMKKEPPQS 87
QY 112 PLGEEMRDRARAHVDALRTHLAPYSDELQRLAARLEAKENGARLAAYHAKATEHLST 171
Db 88 P-MDRVKDLATVYVD-----VLKDSGRDYVSQFEGSA----- 118
QY 172 LSEKAPALEDLRQGLLPVLESFKVSLSALEEYTKKLNQGTGLKLLDNWDSVTSTFSKL 231
Db 119 -----LGKQLNLKLLDNWDSVTSTFSKL 141
QY 232 REQLGPVTQEFWDNLEKETEGLRQMSKDLEEVKAKVQPYLDDFOKKQWEMELYRQKVE 291
Db 142 REQLGPVTQEFWDNLEKETEGLRQMSKDLEEVKAKVQPYLDDFOKKQWEMELYRQKVE 201
QY 292 PLRAELQEGARQKLHLEQKLSPLGSEMRDRARAHVDALRTHLAPYSDELQRLAARLEA 351
Db 202 PLRAELQEGARQKLHLEQKLSPLGSEMRDRARAHVDALRTHLAPYSDELQRLAARLEA 261
QY 352 LKENGARLAAYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVSLSALEEYTKKL 411
Db 262 LKENGARLAAYHAKATEHLSTLSEKAPALEDLRQGLLPVLESFKVSLSALEEYTKKL 321
QY 412 NTQ 414
Db 322 NTQ 324

RESULT 4
US-09-987-107-48
; Sequence 48, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
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; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 48
; LENGTH: 316
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7 H6 Trip-A-Apo A-1 - AmpR plasmid
US-09-987-107-48

Query Match      49.9%; Score 1056; DB 2; Length 316;
Best Local Similarity 54.4%; Pred. No. 1e-68;
Matches 234; Conservative 25; Mismatches 41; Indels 130; Gaps 8;

Qy 1 MGHHHHH---IEGR-----LKLNDWDSVTST--FSKUREQLGPTVQEFWNL 44
Db 1 MGSHHHHHSGISQGRSPGTEPTQPKKIVNAKDVNTKMFELKSR-----DTL 52
Qy 45 EKETGLRQEMSKDLSEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELOEGARQKLH 104
Db 53 AQEALLKEQALQTVSLKGSDEPP-----QSPW----- 81
Qy 105 ELQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAHYHAK 164
Db 82 -----DRVKOLATVYVD-----VLKSGRDYVSQFEGS 109
Qy 165 ATEHLSTLSEKAPALEDLRQGLLPVLESFKVSLSEAYTKLNTQGTTLKLDNDWDSV 224
Db 110 A-----LQKQLNLKLDNDWDSV 126
Qy 225 TSTFSLRQLGPTVQEFWNLKEKETGLRQEMSKDLSEEVKAKVQPYLDDFQKKWQEME 284
Db 127 TSTFSLRQLGPTVQEFWNLKEKETGLRQEMSKDLSEEVKAKVQPYLDDFQKKWQEME 186
Qy 285 LYRQKVEPLRAELOEGARQKLHLEQKLSPLGEMRDRARAHVDALRTHLAPYSDELQRL 344
Db 187 LYRQKVEPLRAELOEGARQKLHLEQKLSPLGEMRDRARAHVDALRTHLAPYSDELQRL 246
Qy 345 LAARLEALKENGARLAHYHAKATEHLSLSEKAPALEDLRQGLLPVLESFKVSLSEAL 404
Db 247 LAARLEALKENGARLAHYHAKATEHLSLSEKAPALEDLRQGLLPVLESFKVSLSEAL 306
Qy 405 EYTKKLNTQ 414
Db 307 EYTKKLNTQ 316

RESULT 5
US-09-987-107-64
; Sequence 64, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 54
; LENGTH: 316
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7H6 Trip-A-Apo A1 K9A K15A - AmpR plasmid
US-09-987-107-54

; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 64
; LENGTH: 324
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7H6 Trip-A-Tn-Apo A1-final - AmpR plasmid
US-09-987-107-64

Query Match      49.9%; Score 1056; DB 2; Length 324;
Best Local Similarity 56.3%; Pred. No. 1.1e-68;
Matches 238; Conservative 32; Mismatches 45; Indels 108; Gaps 11;

Qy 1 MGHHHHH-----IEGRKLKLDNDWDSVTSTFSKREQLGPTVQEFWNLKEKETEGURQ 53
Db 1 MGSHHHHHSGSGSIQGRSPGTE-----PPTQK-----PKKIVNAKK 38
Qy 54 EM--SKDLEEVKAKVQPYLDDFQKKWQEMELYRQKVEPLRAELOEGARQKLHLEQKLS 111
Db 39 DVVNTKMFELKSR-----LDTL-----AQEALLKEQ-QALQTVSLKGT--KVMKPEPPQS 87
Qy 112 PLGEMRDRARAHVDALRTHLAPYSDELQRLAARLEALKENGARLAHYHAKATEHLS 171
Db 88 P-WDRVKDLATVYVD-----VLKSGRDYVSQFEGSA----- 118
Qy 172 LSEKAPALEDLRQGLLPVLESFKVSLSEAYTKLNTQGTTLKLDNDWDSVTSTFSKL 231
Db 119 -----LQKQLNLKLDNDWDSVTSTFSKL 141
Qy 232 REQLGPTVQEFWNLKEKETGLRQEMSKDLSEEVKAKVQPYLDDFQKKWQEMELYRQKVE 291
Db 142 REQLGPTVQEFWNLKEKETGLRQEMSKDLSEEVKAKVQPYLDDFQKKWQEMELYRQKVE 201
Qy 292 PLRAELOEGARQKLHLEQKLSPLGEMRDRARAHVDALRTHLAPYSDELQRLAARLEA 351
Db 202 PLRAELOEGARQKLHLEQKLSPLGEMRDRARAHVDALRTHLAPYSDELQRLAARLEA 261
Qy 352 LKENGARLAHYHAKATEHLSLSEKAPALEDLRQGLLPVLESFKVSLSEAYTKL 411
Db 262 LKENGARLAHYHAKATEHLSLSEKAPALEDLRQGLLPVLESFKVSLSEAYTKL 321
Qy 412 NTQ 414
Db 322 NTQ 324

RESULT 6
US-09-987-107-54
; Sequence 54, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 54
; LENGTH: 316
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7H6 Trip-A-Apo A1 K9A K15A - AmpR plasmid
US-09-987-107-54
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Query Match 49.6%; Score 1051; DB 2; Length 316;  
Best Local Similarity 54.9%; Pred. No. 2.3e-68;  
Matches 236; Conservative 22; Mismatches 42; Indels 130; Gaps 9;

Qy 1 MGHHHHH---IEGRLL-----KLLDN--WDSV--TSTFSKRLRQLGQVPTQEFWDNL 44  
Db 1 MGSHHHHHSGSIQGRSPCTEPTQKPAIVNAKADVVNTKMFELKSRLL-----DTL 52  
Qy 45 EKETEGRLRQEMSKDLEEVKAKVQPYLDDFOKKQWQEMELYRQKVEPLRAELQEGAROKLH 104  
Db 53 AQEVALLEQQAQVLSLKSDEPP-----QSPW----- 81  
Qy 105 ELQEKLSPLGEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAK 164  
Db 82 -----DRVKDLATVYVD-----VLKDSGRDYVSQFEGS 109  
Qy 165 ATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALSEYTKKLNTOGTLKLLDNWDSV 224  
Db 110 A-----LQKQLNLKLLDNWDSV 126  
Qy 225 TSTFSKRLRQLGQVPTQEFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFOKKQWQEME 284  
Db 127 TSTFSKRLRQLGQVPTQEFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFOKKQWQEME 186  
Qy 285 LYRQKVEPLRAELQEGAROKLHELOEKLSPGEMDRARAHVDALRTHLAPYSDELRLQ 344  
Db 187 LYRQKVEPLRAELQEGAROKLHELOEKLSPGEMDRARAHVDALRTHLAPYSDELRLQ 246  
Qy 345 LAARLEALKENGARLAAYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSAL 404  
Db 247 LAARLEALKENGARLAAYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSAL 306  
Qy 405 EYTKKLNTO 414  
Db 307 EYTKKLNTO 316

RESULT 7  
US-09-987-107-66  
; Sequence 66, Application US/09987107  
; Patent No. 6897039  
; GENERAL INFORMATION:  
; APPLICANT: GRAVERSEN, Jonas  
; APPLICANT: MOESTRUP, Soren  
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES  
; FILE REFERENCE: GRAVERSEN1A  
; CURRENT APPLICATION NUMBER: US/09/987,107  
; CURRENT FILING DATE: 2001-11-13  
; PRIOR APPLICATION NUMBER: US 60/264,022  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: DK PA2001 00057  
; PRIOR FILING DATE: 2001-01-15  
; PRIOR APPLICATION NUMBER: DK PA2000 01682  
; PRIOR FILING DATE: 2000-11-10  
; NUMBER OF SEQ ID NOS: 91  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 66  
; LENGTH: 324  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: pT7H6 Trip-A-Tn-Apo A1 final K9AK15A - AmpR plasmid  
US-09-987-107-66

Query Match 49.6%; Score 1051; DB 2; Length 324;  
Best Local Similarity 56.3%; Pred. No. 2.4e-68;  
Matches 238; Conservative 30; Mismatches 47; Indels 108; Gaps 11;  
Qy 1 MGHHHHH-----ISGRLLKLLDNWDSVTSTFSKRLRQLGQVPTQEFWDNLEKETEGRLQ 53  
Db 1 MGSHHHHHSGSGSIQGRSPGTE-----PPTQK-----PKAIVNAKA 38

Qy 54 EM--SKDLEEVKAKVQPYLDDFOKKQWQEMELYRQKVEPLRAELQEGAROKLHELOEKL 111  
Db 39 DVVNTKMFELKSR-----LDTL-----AQEVALLEQ-QALQTVSLKGT--KVHMKEPQS 87  
Qy 112 PLGEMDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGARLAAYHAKATEHLST 171  
Db 88 P-WDRVKDLATVYVD-----VLKDSGRDYVSQFEGSA----- 118  
Qy 172 LSEKAKPALEDLROGLLPVLESFKVSFLSALSEYTKKLNTOGTLKLLDNWDSVTSTFSKL 231  
Db 119 -----LQKQLNLKLLDNWDSVTSTFSKL 141  
Qy 232 REQLGPVPTQEFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFOKKQWQEMELYRQKVE 291  
Db 142 REQLGPVPTQEFWDNLEKETEGRLRQEMSKDLEEVKAKVQPYLDDFOKKQWQEMELYRQKVE 201  
Qy 292 PLRAELQEGAROKLHELOEKLSPGEMDRARAHVDALRTHLAPYSDELRLQRLAARLEA 351  
Db 202 PLRAELQEGAROKLHELOEKLSPGEMDRARAHVDALRTHLAPYSDELRLQRLAARLEA 261  
Qy 352 LKENGARLAAYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALSEYTKKL 411  
Db 262 LKENGARLAAYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALSEYTKKL 321  
Qy 412 NTQ 414  
Db 322 NTQ 324

RESULT 8  
US-09-987-107-58  
; Sequence 58, Application US/09987107  
; Patent No. 6897039  
; GENERAL INFORMATION:  
; APPLICANT: GRAVERSEN, Jonas  
; APPLICANT: MOESTRUP, Soren  
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES  
; FILE REFERENCE: GRAVERSEN1A  
; CURRENT APPLICATION NUMBER: US/09/987,107  
; CURRENT FILING DATE: 2001-11-13  
; PRIOR APPLICATION NUMBER: US 60/264,022  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: DK PA2001 00057  
; PRIOR FILING DATE: 2001-01-15  
; PRIOR APPLICATION NUMBER: DK PA2000 01682  
; PRIOR FILING DATE: 2000-11-10  
; NUMBER OF SEQ ID NOS: 91  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 58  
; LENGTH: 323  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: pT7H6 Trip-A-Fn-Apo A1-final - AmpR plasmid  
US-09-987-107-58

Query Match 49.6%; Score 1049.5; DB 2; Length 323;  
Best Local Similarity 56.4%; Pred. No. 3.1e-68;  
Matches 235; Conservative 24; Mismatches 61; Indels 97; Gaps 8;  
Qy 1 MG-HHHHHHIEGRLLKLLDNWDSVTSTFSKRLRQLGQVPTQEFWDNLEKETEGRLRQEMSKDL 59  
Db 1 MGSHHHHHSGSGS-----GSIQGRSPGTEPTQKPK 31  
Qy 60 EYKAKVQPYLDDFOKKQWQEMELYRQKVEPLRAELQEGAROKLHELOEKLSPGEMDRD 119  
Db 32 KIVNAK-----KDVVNTKMFEL---KSRLDTL---AQEVALLEQQAQVLSLKGTSQGD 81  
Qy 120 RARAHVDALRTHLAPYS--DELRLQRLAARLEALKENGARLAAYHAKATEHLSTLSEKAK 177  
Db 82 E-----PPOSPMDVRKDLATVYVDVLKDSGRDYVSQFEGSA----- 117  
Qy 178 PALEDLROGLLPVLESFKVSFLSALSEYTKKLNTOGTLKLLDNWDSVTSTFSKRLRQLG 237

Db 118 -----LGRQLNLKLLDNWDSVTSTFSKLRQLGP 146  
QY VTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDDFQKKQWEMELYRQKVEPLRAEL 297  
Db 147 VTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDDFQKKQWEMELYRQKVEPLRAEL 206  
QY QEGARQKLHELOEKLSPGGEEMRDRARAHVDALRTHLAPYSDLRQRLAARLEALKENG 357  
Db 207 QEGARQKLHELOEKLSPGGEEMRDRARAHVDALRTHLAPYSDLRQRLAARLEALKENG 266  
QY 358 ARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQ 414  
Db 267 ARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQ 323  
RESULT 9  
US-09-987-107-56  
; Sequence 56, Application US/09987107  
; Patent No. 6897039  
; GENERAL INFORMATION:  
; APPLICANT: GRAVERSEN, Jonas  
; APPLICANT: MOESTRUP, Soren  
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES  
; FILE REFERENCE: GRAVERSENIA  
; CURRENT APPLICATION NUMBER: US/09/987,107  
; CURRENT FILING DATE: 2001-11-13  
; PRIOR APPLICATION NUMBER: DK PA2001 00057  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: DK PA2000 01682  
; PRIOR FILING DATE: 2001-01-15  
; PRIOR APPLICATION NUMBER: DK PA2000 01682  
; PRIOR FILING DATE: 2000-11-10  
; NUMBER OF SEQ ID NOS: 91  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 56  
; LENGTH: 323  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: p7H6 Trip-A-Fn-Apo A1 - AmpR plasmid  
; US-09-987-107-56  
Query Match 49.5%; Score 1047.5; DB 2; Length 323;  
Best Local Similarity 56.4%; Pred. No. 4.3e-68;  
Matches 235; Conservative 23; Mismatches 62; Indels 97; Gaps 8;  
QY 1 MG-HHHHHHHGSGS-----GSIQGRSPGTEPPTQPK 31  
Db 1 MGSHHHHHHGGSGS-----GSIQGRSPGTEPPTQPK 31  
QY 60 EEVAKVQPYLDDDFQKKQWEMELYRQKVEPLRAELQEGARQKLHELOEKLSPGGEEMRD 119  
Db 32 KIVNAK----KDVNTKMFEL---KSLDLTL---AQEVALLKEQALQTVLSKSGSGHD 81  
QY 120 RARAHVDALRTHLAPYS--DELRQRLAARLEALKENGARLAHYHAKATEHLSLSEKAK 177  
Db 82 E-----PQSPFWRVKDLATVYVDVKDSGRDYVSQFESA----- 117  
QY 178 PALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQGLTKLLDNWDSVTSTFSKLRQLGP 237  
Db 118 -----LGRQLNLKLLDNWDSVTSTFSKLRQLGP 146  
QY 238 VTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDDFQKKQWEMELYRQKVEPLRAEL 297  
Db 147 VTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDDFQKKQWEMELYRQKVEPLRAEL 206  
QY 298 QEGARQKLHELOEKLSPGGEEMRDRARAHVDALRTHLAPYSDLRQRLAARLEALKENG 357  
Db 207 QEGARQKLHELOEKLSPGGEEMRDRARAHVDALRTHLAPYSDLRQRLAARLEALKENG 266  
QY 358 ARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQ 414

Db 267 ARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQ 323  
RESULT 10  
US-09-987-107-60  
; Sequence 60, Application US/09987107  
; Patent No. 6897039  
; GENERAL INFORMATION:  
; APPLICANT: GRAVERSEN, Jonas  
; APPLICANT: MOESTRUP, Soren  
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES  
; FILE REFERENCE: GRAVERSENIA  
; CURRENT APPLICATION NUMBER: US/09/987,107  
; CURRENT FILING DATE: 2001-11-13  
; PRIOR APPLICATION NUMBER: US 60/264,022  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: DK PA2001 00057  
; PRIOR FILING DATE: 2001-01-15  
; PRIOR APPLICATION NUMBER: DK PA2000 01682  
; PRIOR FILING DATE: 2000-11-10  
; NUMBER OF SEQ ID NOS: 91  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 60  
; LENGTH: 323  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: p7H6 Trip-A-Fn-Apo A1 final K9AK15A - AmpR plasmid  
; US-09-987-107-60  
Query Match 49.4%; Score 1045.5; DB 2; Length 323;  
Best Local Similarity 72.9%; Pred. No. 6e-68;  
Matches 226; Conservative 19; Mismatches 53; Indels 12; Gaps 4;  
QY 111 SPGGEEMRDRARAHVDALRTHLAPYSDLRQRLAARLEALKENGARLAHYHAKATEHLS 170  
Db 20 SPGTEPPTQPKAIVNAKADV---NTKMFELKSLRDLTLAQE-VALLKEQALQTVLSLK 75  
QY 171 TLSEKAKP-----ALEDLRQGLLPVLESFKVSFLSALAEYTKLNTQGLTKLLDNWDSV 224  
Db 76 GTSGQDEFPQSPWDRVKDLATVYVDVKDSGRDYVSQFE--GSALGKQLNLKLLDNWDSV 133  
QY 225 TSTFSKLRQLGPVTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDDFQKKQWEME 284  
Db 134 TSTFSKLRQLGPVTQFWDNLEKETEGRLQEMSKDLEEVKAKVQPYLDDDFQKKQWEME 193  
QY 285 LYRQKVEPLRAELQEGARQKLHELOEKLSPGGEEMRDRARAHVDALRTHLAPYSDLRQ 344  
Db 194 LYRQKVEPLRAELQEGARQKLHELOEKLSPGGEEMRDRARAHVDALRTHLAPYSDLRQ 253  
QY 345 LAARLEALKENGARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSAL 404  
Db 254 LAARLEALKENGARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSAL 313  
QY 405 EYTKLNTQ 414  
Db 314 EYTKLNTQ 323  
RESULT 11  
US-09-987-107-8  
; Sequence 8, Application US/09987107  
; Patent No. 6897039  
; GENERAL INFORMATION:  
; APPLICANT: GRAVERSEN, Jonas  
; APPLICANT: MOESTRUP, Soren  
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES  
; FILE REFERENCE: GRAVERSENIA  
; CURRENT APPLICATION NUMBER: US/09/987,107  
; CURRENT FILING DATE: 2001-11-13  
; PRIOR APPLICATION NUMBER: US 60/264,022  
; PRIOR FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: DK PA2001 00057

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; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 304
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(56)
; OTHER INFORMATION: Trimerisation module from tetranectin
; NAME/KEY: misc feature
; LOCATION: (13)..(13)
; OTHER INFORMATION: Mutagen
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: Mutagen
; NAME/KEY: misc feature
; LOCATION: (62)..(304)
; OTHER INFORMATION: Mature Apo A1
; US-09-987-107-8

Query Match          49.2%; Score 1042; DB 2; Length 304;
Best Local Similarity 72.9%; Pred. No. 1e-67;
Matches 226; Conservative 19; Mismatches 53; Indels 12; Gaps 4;

Qy 111 SPLGEEMDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGGAARLAHYHAKATEHLS 170
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 1 SPGTEPTQPKAIVNAKADV---NTKMFELKSRDLTLAQE-VALLKEQQAALQTVSLK 56

Qy 171 TLSEKAKP-----ALEDLRQGLLPVLESFKVSFLSALAEYTKKLTQGTILKLLDNWDSV 224
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 57 GTSGQDEPPQSPMDRVKDLATVYVDVLKDSGRDVSQFE--GSALGKQLNLKLLDNWDSV 114

Qy 225 TSTFSKLEOLGPVTOBFDNLEKETEGLOEMSKDLEEVKAKVQPYLDLDFQKKWQEME 284
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 115 TSTFSKLEOLGPVTOBFDNLEKETEGLOEMSKDLEEVKAKVQPYLDLDFQKKWQEME 174

Qy 285 LYRQKVEPLRAELQEGARQKLHELOEKLSPIGEEMDRARAHVDALRTHLAPYSDELQR 344
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 175 LYRQKVEPLRAELQEGARQKLHELOEKLSPIGEEMDRARAHVDALRTHLAPYSDELQR 234

Qy 345 LAARLEALKENGGAARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSAL 404
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 235 LAARLEALKENGGAARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSAL 294

Qy 405 EYTKKLTNQ 414
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 295 EYTKKLTNQ 304

RESULT 12
US-09-987-107-7
; Sequence 7, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7

Query Match          49.1%; Score 1039.5; DB 2; Length 261;
Best Local Similarity 80.8%; Pred. No. 1.3e-67;
Matches 224; Conservative 18; Mismatches 51; Indels 16; Gaps 4;

Qy 112 PLGEEMDRARAHVDALRTHLAPYSDELQRRLAARLEALKENGGAARLAHYHAKATEHLS 171
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 6 PPTQKPKKIVNAKDVNT-----KMFELKSRDLTLAQE-VALLKEQQAALQTVSLK 57

Qy 172 LSEKAKP-----ALEDLRQGLLPVLESFKVSFLSALAEYTKKLTQGTILKLLDNWDSV 225
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 58 TSQDEPPQSPMDRVKDLATVYVDVLKDSGRDVSQFE--GSALGKQLNLKLLDNWDSV 115

Qy 226 TSTFSKLEOLGPVTOBFDNLEKETEGLOEMSKDLEEVKAKVQPYLDLDFQKKWQEME 285
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 116 TSTFSKLEOLGPVTOBFDNLEKETEGLOEMSKDLEEVKAKVQPYLDLDFQKKWQEME 175

Qy 286 YRQKVEPLRAELQEGARQKLHELOEKLSPIGEEMDRARAHVDALRTHLAPYSDELQR 345
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 176 YRQKVEPLRAELQEGARQKLHELOEKLSPIGEEMDRARAHVDALRTHLAPYSDELQR 235

Qy 346 AARLEALKENGGAARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSAL 405
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 236 AARLEALKENGGAARLAHYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSAL 295

Qy 406 EYTKKLTNQ 414
||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
D6 296 EYTKKLTNQ 304

RESULT 13
US-09-987-107-52
; Sequence 52, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 52
; LENGTH: 261
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: pT7 H6 Fx Cys-Apo A1 plasmid
; US-09-987-107-52

Query Match          49.1%; Score 1039.5; DB 2; Length 261;
Best Local Similarity 80.8%; Pred. No. 1.3e-67;
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Matches 211; Conservative 0; Mismatches 1; Indels 49; Gaps 2;

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Qy 1 MGHHHHH---IEGR-----12
Db 1 MSHHHHHHGGIEGRGGDEPPQSPWDRVKDLATVYVDVLKDSGRDYVSQFEGSALGKQL 60
Qy 13 -LKLLDNWDSVTSTFSKRLQGLGPVTQFWDNLEKETEGLRQEMSKOLEEVKAKVQPYLD 71
Db 61 NLKLLDNWDSVTSTFSKRLQGLGPVTQFWDNLEKETEGLRQEMSKOLEEVKAKVQPYLD 120
Qy 72 DFOKKWQEMELYRQKVEPLRAELQEGARQKHLQEKLSPLGEMRDRARAHVDALRTH 131
Db 121 DFOKKWQEMELYRQKVEPLRAELQEGARQKHLQEKLSPLGEMRDRARAHVDALRTH 180
Qy 132 LAPYSDELQRQLAARLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVL 191
Db 181 LAPYSDELQRQLAARLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVL 240
Qy 192 ESFKVSFLSALEYTKLNTQ 212
Db 241 ESFKVSFLSALEYTKLNTQ 261
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## RESULT 14

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US-09-987-107-6
; Sequence 6, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 304
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(58)
; OTHER INFORMATION: Trimerisation module from tetranectin
; NAME/KEY: misc feature
; LOCATION: (59)..(61)
; OTHER INFORMATION: Linker
; NAME/KEY: misc feature
; LOCATION: (62)..(304)
; OTHER INFORMATION: Mature Apo A1
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## US-09-987-107-6

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Query Match 49.0%; Score 1038; DB 2; Length 304;
Best Local Similarity 72.5%; Pred. No. 1.9e-67;
Matches 224; Conservative 17; Mismatches 52; Indels 16; Gaps 4;

Qy 112 PLGEMRDRARAHVDALRTHLAPYSDELQRQLAARLEALKENGGRARLAAYHAKATEHLS 171
Db 6 PTPQPKKIYNAKDVNT-----KMFEEUKSRDLDTLAQE-VALLKEQALQTVSLK 57
Qy 172 LSEKAKP-----ALEDLRQGLLPVLESFKVSFLSALAEYTKKLTQGTLLKLLDNWDSVT 225
Db 58 SSGHDEPPQSPWDRVKDLATVYVDVLKDSGRDYVSQFEGSALGKQLNKLKLLDNWDSVT 115
Qy 226 STFSKRLQGLGPVTQFWDNLEKETEGLRQEMSKOLEEVKAKVQPYLDLDFQKKWQEMEL 285
Db 116 STFSKRLQGLGPVTQFWDNLEKETEGLRQEMSKOLEEVKAKVQPYLDLDFQKKWQEMEL 175
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Qy 286 YRQKVEPLRAELQEGARQKHLQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRQL 345
Db 176 YRQKVEPLRAELQEGARQKHLQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRQL 235
Qy 346 AARLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALE 405
Db 236 AARLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALE 295
Qy 406 EYTKKLTQ 414
Db 296 EYTKKLTQ 304
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## RESULT 15

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US-09-987-107-5
; Sequence 5, Application US/09987107
; Patent No. 6897039
; GENERAL INFORMATION:
; APPLICANT: GRAVERSEN, Jonas
; APPLICANT: MOESTRUP, Soren
; TITLE OF INVENTION: APOLIPOPROTEINS ANALOGUES
; FILE REFERENCE: GRAVERSENIA
; CURRENT APPLICATION NUMBER: US/09/987,107
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/264,022
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: DK PA2001 00057
; PRIOR FILING DATE: 2001-01-15
; PRIOR APPLICATION NUMBER: DK PA2000 01682
; PRIOR FILING DATE: 2000-11-10
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 301
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(58)
; OTHER INFORMATION: Trimerisation module from tetranectin
; NAME/KEY: misc feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: Mutagen
; NAME/KEY: misc feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: Mutagen
; NAME/KEY: misc feature
; LOCATION: (59)..(301)
; OTHER INFORMATION: Apo-A1 mature
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## US-09-987-107-5

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Query Match 48.9%; Score 1036.5; DB 2; Length 301;
Best Local Similarity 73.3%; Pred. No. 2.5e-67;
Matches 225; Conservative 18; Mismatches 55; Indels 9; Gaps 4;

Qy 111 SPLGEMRDRARAHVDALRTHLAPYSDELQRQLAARLEALKENGGRARLAAYHAKATEHLS 170
Db 1 SPGTPTPTQPKAIYNAKADV---NTKMFEEUKSRDLDTLAQE-VALLKEQALQTVSLK 56
Qy 171 TLSEKAK---PALBEDLRQGLLPVLESFKVSFLSALAEYTKKLTQGTLLKLLDNWDSVTST 227
Db 57 GSDEPPQSPWDRVKDLATVYVDVLKDSGRDYVSQFEGSALGKQLNKLKLLDNWDSVTST 114
Qy 228 FSKRLQGLGPVTQFWDNLEKETEGLRQEMSKOLEEVKAKVQPYLDLDFQKKWQEMELYR 287
Db 115 FSKRLQGLGPVTQFWDNLEKETEGLRQEMSKOLEEVKAKVQPYLDLDFQKKWQEMELYR 174
Qy 288 QKVEPLRAELQEGARQKHLQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRQLA 347
Db 175 QKVEPLRAELQEGARQKHLQEKLSPLGEMRDRARAHVDALRTHLAPYSDELQRQLA 234
Qy 348 RLEALKENGGRARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALEBY 407
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Db 235 RLEALKENGARLAAYHAKATEHLSLSEKAKPALEDLRQGLLPVLESFKVSFLSALEYY 294  
Qy 408 TKKLNTQ 414  
Db 295 TKKLNTQ 301

Search completed: December 4, 2005, 06:10:11  
Job time : 48 secs





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Qy 360 LAEYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSPFLSALEYTKKLNQ 414
Db 189 LAEYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSPFLSALEYTKKLNQ 243

RESULT 2
US-10-821-234-901
; Sequence 901, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821,234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt_seq_genes Version 1.0
; SEQ ID NO 901
; LENGTH: 1586
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-821-234-901

Query Match 9.3%; Score 197.5; DB 6; Length 1586;
Best Local Similarity 22.9%; Pred. No. 0.00017;
Matches 126; Conservative 54; Mismatches 189; Indels 181; Gaps 19;

Qy 27 SKUREQLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDD -----F 73
Db 979 SILRDALNQATSVESQKNAELAKRQELSKVSKELVEKSEAVRQDQQRKALEAKAAAF 1038

Qy 74 QKKWQEMELYRQKVEPLRAELOEGARQKHL -----ELOEKL 110
Db 1039 EKQVLQQAHSRESEALQKRLDEVSHRELCHTOSHASLRADAEKAEQEQQQAELHLSKL 1098

Qy 111 SPLGEEMRDRARAHVDALRTHL-----APYSDELRLQRLAARLEALKENGAR----- 157
Db 1099 QSSEAEVRSKCE-ELSLGHGLQLEARAENSGLTIERIS-IEALLLEAGQARDQADVOASQA 1156

Qy 158 -----LAEYHAKATEHLSTLSEKAKP 178
Db 1157 EADQQQTRLKELESQVSGLEKEATELREAVEQQKVKNLREKNWKAMEALATAEQACK 1216

Qy 179 ALLEDLRO-----GLLPVLESFKVSPFLSALEYTKKLNQTKLLD- 219
Db 1217 KLHSLTQAKSESEKQCLIEAQWTWALLLPLSVLAQQNYTEWLQDLKEKGGPTLLKHP 1276

Qy 220 --NWDSTVSTFSKLREQLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFOK 277
Db 1277 PAPAEPSSDLASKLRE-----AEETQSTLQASCDQYRSILAETEGMLRDLOK 1323

Qy 278 KWQEMELYRQKVEPLRAELOEG--ARQKHLQELKSLPIGE-EMRDRARAHV-----DAL 330
Db 1324 SVEEEQVMRAKVGAABEELQKSRVTVKHLEEVKELK--GELESSQVREHTLHLEAEL 1381

Qy 331 RTHLAPYSDE-----LRQL-----NARLEALKEN----- 355
Db 1382 EKHWAAASACQNVAKVAGLRQLRLLESQSLDAAKSEAQKQDELALVRQQISEMKSHV 1441

Qy 356 -----GGARLAEYHAKATE-----HLSTLSEKAKPALED---LRQGLLPVLESFKVSPFLSA 403
Db 1442 EDGIAGAPASSPAPAEQDPVLKTLQLEWTEALLEDQTORQKLTAEFEERQTS-ACR 1500

Qy 404 LEEYTKKLN 413
Db 1501 LOBELEKLT 1510
```

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RESULT 3
US-10-821-234-975
; Sequence 975, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821,234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt_seq_genes Version 1.0
; SEQ ID NO 975
; LENGTH: 989
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-821-234-975

Query Match 8.7%; Score 184.5; DB 6; Length 989;
Best Local Similarity 22.1%; Pred. No. 0.00053;
Matches 92; Conservative 81; Mismatches 146; Indels 97; Gaps 18;
```

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Qy 15 LLDNWDSTVSTFSKLREQL-GPVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDF 73
Db 606 LPEKYQEAQBEIIMKLDTLKSMQTQASD---EADMKEAMRMWIDELNKKQVSE-LSQL 660

Qy 74 QKKWQEMELYRQKVEPLRAELOEGARQKHLQ-EKLSPLGEEMRDRARAHVDALRTHL 132
Db 661 YKEAQAELEDYRK-----RKSLDEVTAETHKAHEKLMOLTIVNSRAKAE---DALSEMK 712

Qy 133 APYSDELRO--RLAARLEALKENGARLAEYHAKATEHLSTLSEKAKPALEDLROGLLPV 190
Db 713 SQYSKVLNLTQLKLVDAQENS-----VSIETHLQVIT-TLRTAKHEEKISNL 763

Qy 191 LESFKVSPFLSALEYTKKLNQTKLLDNWDSVT-----STFSKLREQLGPVTQBFWD 244
Db 764 KE-----HLASKEVEVAKLEQ---LLEBKAAMTDAMVPRSSVEKLIQ-----S 803

Qy 245 NLEKETEGLRQEMSKDLEEVKAKVQPYLDDFOKQWQEMELYRQKVEPLRAE-----LQ 298
Db 804 SLESEVSVLASKLSESVKE-----KEKVHSEVVQIRSEVSQVKREKENIQTL 851

Qy 299 EGARQKHLQELKSLPIGEEMRDRARAHVDALRTHLAPYSDELRLQRLAARLEALKENGGA 358
Db 852 KSKEQVNNELLQKFOQAQBELAEMKR-----YAES-----SSKLEEDKDKKIN 894

Qy 359 RLAEYHAKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSPFLSALEYTKKLNQ 414
Db 895 EMSKEVTKLKEALNSLSQLSYSTSSSKROS-----QQLEALQOQVQLQ 940
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RESULT 4
US-10-131-826A-16
; Sequence 16, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyere, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
```



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; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821.234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt_seq_genes Version 1.0
; SEQ ID NO 1662
; LENGTH: 747
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-234-1662

Query Match          7.4%; Score 157.5; DB 6; Length 747;
Best Local Similarity 22.1%; Pred. No. 0.012;
Matches 91; Conservative 71; Mismatches 139; Indels 111; Gaps 17;

Qy 10 EGRKLDDNWDVSTFSLKRLQGLPVTQFWDNLEKETEGRLQEMSKOLEEVKAKVQPY 69
Db 162 EELKLIIVLEKET---AQLREQVGRMEREL--NHEKERCDOQLQAEQKGLTEVTQSLKME 216
Qy 70 LDDFQKKWQEMELRYKQVEPLRAELQEGARQKLHELQEKLSPLGGEEMRDRARAHVDALR 129
Db 217 NEEFKGRFSD-----ATSKAHVVEEDIVSVTHKAIEK-ETELDSLK 256
Qy 130 THLAPYSDELQRQLAARLEALKENGARLAAYHAKATEHLSTLSEKAKPALEDLRLQGLLP 189
Db 257 DKLKKAQHE-REQLECOLKTEKDE--KELYKVHUKNTE----- 291
Qy 190 VLESFKVSFLSALAEYTKKLTQGTLLKLD-NMDSVSTFSLKRLQGLPVTQFWDNLE- 247
Db 292 -----IENKLMSEVQTLKNDGNKESVITHF---KEEIG-----RLQL 327
Qy 248 --KETEGRLQEMSKDLEEVKAKVQV-YLDDFQKKWQEMELRYKQVEPLRAELQEGARQK 304
Db 328 CLAEKENLQRTF---LLTSSKEDTCFLKEQLRAEQVQATROEVVFLAKELSDAV--- 381
Qy 305 LHELQEKLSPLGGEEMRDRARAHVDALRTHLAPYSDELQRQLAARLEALKENGARLAAYH 364
Db 382 -----NVRDRTWADLHTARLE-----NEKVKQLADAVAEKLNA-----M 417
Qy 365 AKATEHLSTLSEKAKPALEDLRLQGLLPVLESFKVSF--LSALAEYTKKLTQ 414
Db 418 KKQDKTDTLLEHLRREVEDLKLRLQMAADHYKEKFECCQLQKQINKLSQ 469

RESULT 7
US-10-821-234-998
; Sequence 998, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821.234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt_seq_genes Version 1.0
; SEQ ID NO 998
; LENGTH: 514
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-234-998

Query Match          7.2%; Score 152; DB 6; Length 514;
Best Local Similarity 23.5%; Pred. No. 0.016;
Matches 70; Conservative 56; Mismatches 102; Indels 70; Gaps 12;
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```
Qy 42 DNLEKETEGRLQEMSKOLEEVKAKVOPYL-----DDFOKKWQEMELRYKQVEPLRAE 94
Db 81 DEESEEGMEQGLEEE-EEVDPRIOGELEKLNQSTDDINR-ETELDARQKRSVLVE 138
Qy 95 LQEGARQKLHELQEKLSPLGGEEMRDRARAHVDALRTHLAPYSDELQRQLAARLEALKENG 154
Db 139 ----ATVKLDELVKIKGAVESK-----PYWEARRVARQAQLEA----- 174
Qy 155 GARLAEYHAKATEHLSTLSEKAKPALEDLRLQGLLPVLESFKVSFLSALAEYTKKLTQGT 214
Db 175 -----QKATQDFQRAATEVLRAAKETISLABQRLLDDKQFDSAWQB-----MLNHAT 222
Qy 215 LKLLDNWDVSTFSLKRLQGLPVTQFWDNLEKET-----GLRQEMSKOLEEVKAK 267
Db 223 QRWE-----AQTKTRSEL-----VHKETAARYNAAMGRMQLEKLRKRAINK 266
Qy 268 VQPYLDDFQKKWQEMELRYKQVEPLRAELQEGARQKLHELQEKLSPLGGEEMRDRARA 325
Db 267 SKPYF-ELKAKYVQLEQLKKTVDLQAKLTL-AKGEYKMAKNLEMSDEIHERRS 322

RESULT 8
US-10-984-645-2
; Sequence 2, Application US/10984645
; Publication No. US20050244386A1
; GENERAL INFORMATION:
; APPLICANT: Habener, Joel
; APPLICANT: Zulewski, Hendrik
; APPLICANT: Abraham, Elizabeth
; APPLICANT: Vallejo, Mario
; TITLE OF INVENTION: METHOD OF TRANSPLANTING IN A MAMMAL AND TREATING DIABETES MELLITUS
; TITLE OF INVENTION: BY ADMINISTERING A PSEUDO-ISLET LIKE AGGREGATE DIFFERENTIATED FROM
; TITLE OF INVENTION: A NESTIN-POSITIVE PANCREATIC STEM CELL
; FILE REFERENCE: 3284/1223
; CURRENT APPLICATION NUMBER: US/10/984,645
; CURRENT FILING DATE: 2004-11-09
; PRIOR APPLICATION NUMBER: US 09/731,255
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/169,082
; PRIOR FILING DATE: 1999-12-06
; PRIOR APPLICATION NUMBER: US 60/215,109
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: US 60/239,880
; PRIOR FILING DATE: 2000-10-06
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 2
; LENGTH: 1618
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-984-645-2

Query Match          7.2%; Score 152; DB 6; Length 1618;
Best Local Similarity 22.9%; Pred. No. 0.057;
Matches 95; Conservative 69; Mismatches 169; Indels 82; Gaps 17;

Qy 6 HHIEGRKLDDNWDVSTFSLKRLQGLPVTQFWDNLEKETEGRLQEMSKOLEEVKAK 65
Db 473 HSSLEAK-----DQESGGSRVFSICR---GEGEQIWLVEKET-----AIEGK 513
Qy 66 VQPYLDDFQKKWQEMELRYKQVEPLRAELQEGARQKLHELQEKLSPLGGEEMRDRARAHV 125
Db 514 VVSSLQ--QEIWEE--DLNRKEIQDSQVPLE-----KTKLSLGEIEQSLKLE 560
Qy 126 DALRTHLAPYSDELQRQLAARLEAL-----KEN-----GCARLAEYHAKATEHLSTLSE 174
Db 561 NQSHETLERENQECPRSLBEDLTLKSLKLEKNRAIKGCGSETS--RKRCRQLKPTGK 618
Qy 175 KAKPALEDLR---QGLLPVLESFKVSFLSALAEYTKKLTQGTLLKLLDNWDVSTFSLK 231
Db 619 EDTQTLLQSLQKENQELMKSLGNLETLFLPGTE-----NQELVSSLQENLESLETALEKEN 673
Qy 232 REQLGPVTQFWDNLEKETEGRLQEMSKOLEEVKAKVQPYLDDFQKKWQEMELRYKQ-- 289
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Qy 320 RDRARAHVDAL-----RTHLAPYSDELQRLAARL-EALKENGARLAEBYHA 365
Db 328 GGTRRLQPDVNLVNDKQIVIDSKVSLTAY---VRVYQADADAEEAARE-----LAAYIA 379
Qy 366 KATEHLSTLSEKAKPALE-----DLRQGLLVLSEFKVSFLSALE 405
Db 380 SIRAHMGLSLKDYTDLEGVNTLDFVFMFIPV-----BPAYLLALQ 420

RESULT 14
US-10-793-626-1660
; Sequence 1660, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1660
; LENGTH: 885
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-1660

Query Match 6.5%; Score 137; DB 6; Length 885;
Best Local Similarity 19.3%; Pred. No. 0.2;
Matches 83; Conservative 71; Mismatches 137; Indels 138; Gaps 17;

Qy 5 HHHIEGLKLLDNWDSVTSTFKLREQLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKA 64
Db 528 HHHELE-----LDRLKTQEAHLKNEHEFEFEKNDGYOSDKSK--ETLIKE 570

Qy 65 KVQPYLDDFQ---KKWQEMELYRKQVEPLRAELQEGARQKLHELQEKLSPLGEMDRDA 121
Db 571 K-QNHLEIQOQLKQLESDIERYTQLSKEGKASTHQ-TQQQLHQKQSLAVVKERIKSQK 628

Qy 122 RAHVDAUTHLAPYSDELQRLAARL-EALKENGARLAEBYHAKATEHLSTLSEKAKPALE 181
Db 629 QVY-ERLDKQL---SDSERQKI-----EYNEKIKLFNS 657

Qy 182 DLROGLLPVLESFKVSFLSALAEYTKLNTQGTLLKLDNWDVSTSTFKLREQLGPVTQ 241
Db 658 DEMMG-----KDAFEKLREQI----- 673

Qy 242 FWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEMELYRKQVEPLRAELQ--E 299
Db 674 -----QQQENVQNLNQLSEIKQ-----RKDLNKEIKNESQLKCHQDILSIE 719

Qy 300 GARQKLHELQKLSPLGEMRD-----RAHVDAUTHLAPYSDELQRLAAR 348
Db 720 NHYQDIKAKQSKLDVLINHAIDLNDTYQLTAVRARMYDSDET-----IDNLRKKVKLT 774

Qy 349 LEALKENGARL--AEYHAKATEHLSTLSE-----KAKPALEDLROGLLPVLES-FKVS 399
Db 775 KWTIDELGPNVNLNATEQFEELNERYTFINEQRTDLREAKETLEQIIHEMDKEVEGRFKTT 834

Qy 400 FLSALAEY 408
Db 835 FHAVQDHFT 843

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RESULT 15  
US-11-074-176-134  
; Sequence 134, Application US/11074176  
; Publication No. US20050250135A1

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; GENERAL INFORMATION:
; APPLICANT: Klaenhammer, Todd R.
; APPLICANT: Russell, William M.
; APPLICANT: Altermann, Eric
; APPLICANT: McNuliffe, Olivia
; APPLICANT: Peril, Andrea Accarate
; TITLE OF INVENTION: Nucleic Acid Sequences Encoding
; FILE REFERENCE: 5051-694
; CURRENT APPLICATION NUMBER: US/11/074,176
; CURRENT FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: 60/551,161
; PRIOR FILING DATE: 2004-03-08
; NUMBER OF SEQ ID NOS: 381
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 134
; LENGTH: 1189
; TYPE: PRT
; ORGANISM: Lactobacillus acidophilus
; US-11-074-176-134

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Query Match 6.4%; Score 135; DB 7; Length 1189;  
Best Local Similarity 22.2%; Pred. No. 0.35;  
Matches 92; Conservative 66; Mismatches 160; Indels 96; Gaps 18;

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Qy 14 KLLDNWDSVTSTFKLREQLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKA----KVQPY 69
Db 183 KTDQNLIRINDLVKELESRLPLENEQ--SSLAKYKFKGSLDKKXSLLAFEIENINQQ 240

Qy 70 LDQFQK-----KWQEMELYRKQVEPLRAEL-----QEGARQKLHELQEKLSPL 113
Db 241 REIQKSAKKNKILLAKLDDVDKDSQAAYTKQRAEYKCLRDRDHTQNKLLKSLSEL 300

Qy 114 GS-EMDRAPAHVDALRTHLAPYSDELQ---RLAARLEALKENGARLAEBY-----H 162
Db 301 NASLQMAEQSRQFDDATKEBYKQKQKQNLVOLKADLDLDELKKEKKKLQDEQDVLKIER 360

Qy 163 AKATEHLSTLSEKAKPALEDLROGLLPVLESFKVSFLSALAEYTKLNTQGTLLKLDNWD 222
Db 361 GQLTGELNEDPEELNKKLDDIR-----NNYMQLLQDQATTN-----N 397

Qy 223 SVTSTFKLRE-----QLGPVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDF 275
Db 398 QIVNLSDLRSQADTTYTQGDVSKQLTD-AQKLEQLRIE-GKKLTDKROKEQNAIVRI 455

Qy 276 QKKWQEB---EMELYRKQVEPLRAELQEB-----GAKQKLHELQEB-- 310
Db 456 NKQNNQNLTELNLRLQVNVNARNELEKVEARHEALVNIQKRHEGYGYYGVNVNLHNDFA 515

Qy 311 -KLSPLGEMDRDRAHVDAUTHLAPYSDEL--RQRLAAR--LEALKENGAR 359
Db 516 GVITGAVGELITFPFALEA-AMTTALGGGVQDILTESRISARNAINKLNKHGGR 568

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Search completed: December 4, 2005, 06:23:11  
Job time : 13 secs

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